

Michigan Central Station

KEY FACTS



View of the north façade from Roosevelt Park

Building History

- Michigan Central Station opened in 1913. The station was designed by Warren & Wetmore of New York City and Reed & Stern of St. Paul, Minnesota, the same team that designed Grand Central Station in New York. Both stations were set along the New York Central Railroad, owned by William Vanderbilt.
- During World War I, the station accommodated more than 200 trains a day.
- By 1940, more than 4,000 passengers a day traveled through the station. Thousands of workers occupied the office tower.
- In 1975, the building was registered on the National Register of Historic Places.
- In 1988, the last train left the station. The building remained vacant for the next 30 years.
- Ford Motor Company purchased Michigan Central Station in 2018 and announced plans for a comprehensive renovation to return the building to its former grandeur. Michigan Central Station will anchor Ford's planned 30-acre, 1.2 million-square-foot technology hub and community destination.



The north façade with stone columns and replicated entry canopy

Building Size and Details

Overall

- 640,000 square feet of floor area
- 18 stories, including a 13-story tower, basement, and penthouse
- 3,100+ workers have been involved on the renovation
- 1.7 million labor hours tallied on the station and outdoor public spaces
- 3 miles of welding was performed (inside and out)

Exterior

- 8.3 acres of masonry was restored
- 600 tons of unique limestone was replaced, sourced from Dark Hollow Quarry in Indiana—which supplied the station's original construction and was reopened for this project, having closed in the 1980s
- Fourteen 40-foot-high stone columns topped with ornamental capitals along the north (Grand Hall) façade
- More than 4,000 original rivet heads were salvaged off the carriage house and reinstalled to maintain the structure's historic look while still using modern ironworking practices
- 700 tons of structural steel and 300 tons of reinforcing steel were installed (inside and out)
- 31,600 square feet of skylights installed

- 52,000 square feet of flat roof installed
- 33,000 square feet of copper roof installed over Grand Hall
- 102,000 square feet of windows replaced or restored
- 1,300 linear feet of terra cotta cornice was restored
- 200 terra cotta components of the cornice were replicated
- 100,000 square feet of windows are being replaced or restored
- The restored original monumental cast iron windows on the north façade are just over 40 ft tall
- 20 original wood windows, each measuring 20'6" high, were restored along the north half of the building



The Grand Hall with Guastavino tiled ceiling

Interior

- 19,515-square-foot Grand Hall (former waiting room)
- 24,297-square-foot typical floorplate size in office tower
- 24,000 finished Guastavino tiles in Grand Hall (8,000 in each of the 3 bays), involving 8.6 miles of grout laid for repointing
- 44 rams head pilaster capitals in the Reading Room and Tea Room
- 23,000 square feet of marble flooring were restored
- 300 miles of electrical cable and wiring installed

- 5.6 miles of plumbing installed
- 114,200 square feet of terrazzo and marble floor was restored
- 90,000 square feet of decorative plaster was restored or replicated
- 3,990 cubic yards of debris was removed
- 4,200 light fixtures were installed
- The Grand Hall replicated chandeliers are over 10 feet wide and weigh nearly 3,000 lbs
- 28 Mankato-clad columns, that stand 27'-6" tall were restored in the Grand Hall and Ticket Lobby
- More than a dozen unique plaster molds were created in the early stages to ensure pieces in jeopardy of being lost were captured for reproduction, including the 11-foot tall-plaster cartouches from the Grand Hall
- 85 original wood doors were salvaged
- Over 50 unique ornate wood profile types were recreated or restored
- Over 200 plaster ceiling rosettes were restored or recreated throughout the ground floor

Key Challenges

- Removal of 3.5 million gallons of water from the basement
- Guastavino tile restoration included installation of sound vibration monitors to track tile performance. All 24,000 tiles were individually handled (sounded, cleaned, repointed). Only 4% had to be completely replaced, with 33% requiring reinstallation.
- For the columns along the north façade, an 11,500-pound replica of an original capital was hand-carved from a 21,000-pound block of stone. The carving required 428 hours of labor using air-powered chisels and pneumatic handsaws. The capital was then laser scanned to create a 3D template for replication for four additional capitals. Ten original capitals that remained intact were cleaned and repaired.
- A north entry canopy, replicating the original design, was created by referencing original drawings. The perimeter fascia detailing was replicated and marquee lights added.
- The Carriage House clock, which had been missing, was returned to the site and has been restored. The clock in the ticket lobby required replication. Some of the original metalwork that surrounded the clock was located and scanned for replication.
- The original stone-carved frieze above the doors in the Grand Hall was located in Maine and scanned for replication.
- A portion of the acanthus leaf detailing on the chandelier was located to aid in replication. The historic dial on the elevator transom was also located.

Renovation Timeline

- **2011** – Under the building's prior owner, Quinn Evans is selected to complete a conditions assessment and initiate steps to stabilize and protect the building. Quinn Evans oversees the replacement of windows, the design and installation of a service elevator, and the introduction of ventilation into the structure.
- **June 2018** – Ford Motor Company completes the purchase of Michigan Central Station, which at that point has been vacant for 30 years.
- **November 2018** – Ford announces the selection of Quinn Evans to lead the design of the station's restoration. The joint venture of Christman-Brinker is announced as the construction manager. Ford notes that the “joint team of professionals assigned to Michigan Central Station has amassed 235 years of combined historic preservation experience on projects totaling more than \$2 billion.”
- **Late 2018** - Work begins on a structural assessment and plans to remedy and prevent ongoing moisture damage. Ultimately, 2.5 million gallons of water are pumped out of the basement.
- **February 2019** – The Quinn Evans team discovers original construction drawings, dating to 1912, in the Michigan State Archives.
- **November 17, 2020** – During a community meeting, Ford unveils its multiyear development plan for its mobility innovation district in Corktown, with Michigan Central Station as the centerpiece.
- **March 31, 2023** – Michigan Central Station is recognized with the 2023 CoStar Impact Award for Redevelopment of the Year.
- **June 6, 2024** – Michigan Central Station reopens to the public.

